

## **IN THE CLAIMS:**

Please substitute the following claims for the same-numbered claims in the application:

1. (Currently Amended) A method for incremental adaptation of a computer software application, said method comprising ~~the steps of:~~

receiving a request for a component of said application from a device operated by a user of said application;

identifying, in response to said request, components of said application that may be requested by said user in the future, ~~wherein the identifying process comprises any of graph analysis, statistical analysis, learning analysis, and response-time analysis, and wherein said learning analysis associates a penalty with an incorrect prediction of said components of said application that may be requested by said user in the future and biases a probability of selection of successive components more towards recently occurring historical patterns than older historical patterns;~~ and

adapting said identified components for operation with said requesting device[.].

~~wherein only said requested and identified components are adapted for operation with said requesting device.~~

2. (Currently Amended) The method of claim 1, wherein ~~only said requested and identified components are adapted for operation with said requesting device in said response-time analysis a maximum number of components in the neighborhood of a current component that can be adapted within a desired response-time are adapted by:~~

~~calculating the times required to adapt each respective component;~~

~~given a maximum response time and starting from said current component, adding said times in a breadth first search order until a sum of the added times is less than said maximum response time.~~

3. (Original) The method of claim 1, wherein said components are adapted within a

specified maximum time period.

4. (Original) The method of claim 1, wherein components of said application comprise Internet webpages.
5. (Original) The method of claim 1, comprising the further step of:  
performing, in response to said request, a reachability analysis to identify components reachable from said requested component; and  
wherein said step of identifying comprises selecting components from said identified reachable components that are within a specified distance of said requested component.
6. (Original) The method of claim 5, wherein said specified distance comprises an integer value greater than or equal to one, said value representative of a number of transitions between two components of said application.
7. (Original) The method of claim 1, wherein said step of identifying comprises identifying components with a high probability of being requested based on historical request patterns relating to said application.
8. (Original) The method of claim 7, wherein said historical request patterns relate to requests from a substantially similar requesting device.
9. (Original) The method of claim 8, wherein said components are identified taking previously incorrect identification of components that may be requested into account.
10. (Currently Amended) The method of claim 1, wherein said step of identifying comprises identifying the maximum number of components ~~neighbouring~~ neighboring said requested component that can be adapted within a specified period of time.
11. (Currently Amended) A method for incremental adaptation of a computer software

application, said method comprising the steps of:

- receiving a request for a component of said application from a device;
- identifying, in response to said request, components reachable from said requested component, wherein the identifying process comprises any of graph analysis, statistical analysis, learning analysis, and response-time analysis, and wherein said learning analysis associates a penalty with an incorrect prediction of said components of said application that may be requested by said user in the future and biases a probability of selection of successive components more towards recently occurring historical patterns than older historical patterns;
- selecting components within a specified distance of said requested component from said identified reachable components; and
- adapting said selected components for operation with said requesting device[.]., wherein only said requested and identified components are adapted for operation with said requesting device.

12. (Currently Amended) An apparatus for adaptation of a computer software application, said apparatus comprising:

- at least one communications interface for transmitting and receiving data;
- a memory unit for storing data and instructions to be performed by a processing unit; and
- a processing unit coupled to said at least one communications interface and said memory unit, said processing unit programmed to:
  - receive a request for a component of said application from a device operated by a user of said application;
  - identify, in response to said request, components of said application that may be requested by said user in the future, wherein said identify comprises any of graph analysis, statistical analysis, learning analysis, and response-time analysis, and wherein said learning analysis associates a penalty with an incorrect prediction of said components of said application that may be requested by said user in the future and biases a probability of selection of successive components more towards recently occurring historical patterns than older historical patterns; and
  - adapt said identified components for operation with said requesting device[.].

wherein said processing unit is programmed to adapt only said requested and identified components for operation with said requesting device.

13. (Currently Amended) The apparatus of claim 12, wherein ~~said processing unit is programmed to adapt only said requested and identified components for operation with said requesting device~~ in said response-time analysis a maximum number of components in the neighborhood of a current component that can be adapted within a desired response-time are adapted by:

calculating the times required to adapt each respective component;  
given a maximum response time and starting from said current component, adding said times in a breadth first search order until a sum of the added times is less than said maximum response time.

14. (Original) The apparatus of claim 12, wherein said components are adapted within a specified maximum time period.

15. (Original) The apparatus of claim 12, wherein components of said application comprise Internet webpages.

16. (Original) The apparatus of claim 12, wherein said processing unit is further programmed to:

perform, in response to said request, a reachability analysis to identify components reachable from said requested component; and  
identify reachable components for adaptation that are within a specified distance of said requested component.

17. (Original) The apparatus of claim 16, wherein said specified distance comprises an integer value greater than or equal to one, said value representative of a number of transitions between two components of said application.

18. (Original) The apparatus of claim 12, wherein said processing unit is further programmed to identify components with a high probability of being requested based on historical request patterns relating to said application.

19. (Original) The apparatus of claim 18, wherein said historical request patterns relate to requests from a substantially similar requesting device.

20. (Original) The apparatus of claim 19, wherein said processing unit is further programmed to identify components taking previously incorrect identification of components that may be requested into account.

21. (Currently Amended) The apparatus of claim 12, wherein said processing unit is further programmed to identify the maximum number of components ~~neighboring~~ neighboring said requested component that can be adapted within a specified period of time.

22. (Currently Amended) An apparatus for adaptation of a computer software application, said apparatus comprising:

at least one communications interface for transmitting and receiving data;

a memory unit for storing data and instructions to be performed by a processing unit; and

a processing unit coupled to said at least one communications interface and said memory unit, said processing unit programmed to:

receive a request for a component of said application from a device;

identify, in response to said request, components reachable from said requested component, wherein said identify comprises any of graph analysis, statistical analysis, learning analysis, and response-time analysis, and wherein said learning analysis associates a penalty with an incorrect prediction of said components of said application that may be requested by said user in the future and biases a probability of selection of successive components more towards recently occurring historical patterns than older historical patterns;

select components within a specified distance of said requested component from

said identified reachable components; and

adapt said selected components for operation with said requesting device[.].

wherein said processing unit is programmed to adapt only said requested and identified components for operation with said requesting device.

23. (Currently Amended) A computer program product comprising a computer readable medium comprising a computer program recorded therein for adaptation of a computer software application, ~~said computer program product comprising:~~

~~computer program code means for receiving a request for a component of said application from a device operated by a user of said application;~~

~~computer program code means for identifying, in response to said request, components of said application that may be requested by said user in the future; and~~

~~computer program code means for adapting said identified components for operation with said requesting device, performing a method for incremental adaptation of a computer software application, said method comprising:~~

~~receiving a request for a component of said application from a device operated by a user of said application;~~

~~identifying, in response to said request, components of said application that may be requested by said user in the future, wherein the identifying process comprises any of graph analysis, statistical analysis, learning analysis, and response-time analysis, and wherein said learning analysis associates a penalty with an incorrect prediction of said components of said application that may be requested by said user in the future and biases a probability of selection of successive components more towards recently occurring historical patterns than older historical patterns; and~~

~~adapting said identified components for operation with said requesting device,~~

~~wherein only said requested and identified components are adapted for operation with said requesting device.~~

24. (Original) The computer program product of claim 23, wherein only said requested and identified components are adapted for operation with said requesting device.

25. (Original) The computer program product of claim 23, wherein said components are adapted within a specified maximum time period.

26. (Original) The computer program product of claim 23, wherein components of said application comprise Internet webpages.

27. (Currently Amended) The computer program product of claim 23, wherein said method further comprising comprises:

computer program code means for performing, in response to said request, a reachability analysis to identify components reachable from said requested component; and

computer program code means for identifying components for adaptation from said reachable components that are within a specified distance of said requested component.

28. (Original) The computer program product of claim 27, wherein said specified distance comprises an integer value greater than or equal to one, said value representative of a number of transitions between two components of said application.

29. (Currently Amended) The computer program product of claim 23, wherein ~~said computer program code means for identifying comprises computer program code means for~~ wherein said method further comprises identifying components with a relatively higher probability of being requested based on historical request patterns relating to said application.

30. (Original) The computer program product of claim 29, wherein said historical request patterns relate to requests from a substantially similar requesting device.

31. (Original) The computer program product of claim 30, wherein said components are identified taking previously incorrect identification of components that may be requested into

account.

32. (Currently Amended) The computer program product of claim 23, wherein said computer program code means for identifying comprises computer program code means for wherein said method further comprises identifying the maximum number of components neighbouring neighboring said requested component that can be adapted within a specified period of time.

33. (Currently Amended) A computer program product comprising a computer readable medium comprising a computer program recorded therein for adaptation of a computer software application; said computer program product comprising:

computer program code means for receiving a request for a component of said application from a device;

computer program code means for identifying, in response to said request, components reachable from said requested component;

computer program code means for selecting components within a specified distance of said requested component from said identified reachable components; and

adapting said selected components for operation with said requesting device; performing a method for incremental adaptation of a computer software application, said method comprising:

receiving a request for a component of said application from a device;

identifying, in response to said request, components reachable from said requested component, wherein the identifying process comprises any of graph analysis, statistical analysis, learning analysis, and response-time analysis, and wherein said learning analysis associates a penalty with an incorrect prediction of said components of said application that may be requested by said user in the future and biases a probability of selection of successive components more towards recently occurring historical patterns than older historical patterns;

selecting components within a specified distance of said requested component from said identified reachable components; and

adapting said selected components for operation with said requesting device,

wherein only said requested and identified components are adapted for operation with



said requesting device.